CLAIMS:

1. An apparatus comprising

an injection mold machine including a fixed unit and a movable unit arranged to move relative to the fixed unit between a closed position closing the injection mold machine so that the fixed and movable units cooperate to form a mold cavity therebetween to mold plastics material in the mold cavity into a part and an opened position opening the injection mold machine for discharge of the part therefrom,

a part receiver, and

catcher means for catching the part discharged from the injection mold machine when the catcher means is positioned in a catch position and for releasing the part to the part receiver when the catcher means is positioned in a release position, the catcher means being coupled to the fixed unit and the movable unit for movement relative to the fixed and movable units from the catch position to the release position in response to movement of the movable unit relative to the fixed unit from the opened position to the closed position and for movement relative to the fixed and movable units from the release position to the catch position in response to movement of the movable unit relative to the fixed unit from the closed position to the opened position.

2. The apparatus of claim 1, wherein the fixed unit includes a fixed platen and a fixed mold body coupled to the fixed platen, the movable unit includes a movable platen and a movable mold body coupled to the movable platen for movement therewith, the fixed and movable mold bodies cooperate to provide a mold formed to include the mold cavity when the fixed and movable units are positioned in the closed position, and the catcher means is coupled to the fixed and movable platens for pivotable movement relative thereto between the catch and release positions.

3. The apparatus of claim 1, wherein the catcher means includes a first hand coupled to the fixed unit for pivotable movement relative thereto, a second hand coupled to the movable unit for pivotable movement relative thereto, and a hand coupler coupled to the first and second hands for pivotable movement of the first and second hands between the catch position in which the first and second hands

cooperate to catch a part discharged from the injection mold machine and the release position in which the first and second hands cooperate to form a release opening therebetween for release therethrough of the part caught by the first and second hands.

4. The apparatus of claim 3, wherein the first and second hands and the hand coupler cooperate to provide a linkage coupled to the fixed and movable units to move between the catch position and the release position.

5. The apparatus of claim 3, wherein each of the first and second hands includes a plurality of fingers, a first pivot shaft, and a second pivot shaft, the first pivot shaft of the first hand is coupled to the fingers of the first hand and the fixed unit for pivotable movement of the fingers of the first hand relative to the fixed unit, the second pivot shaft of the first hand is coupled to the fingers of the first hand and the hand coupler for pivotable movement between the fingers of the first hand and the hand coupler, the first shaft of the second hand is coupled to the fingers of the second hand and the movable unit for pivotable movement of the fingers of the second hand relative to the movable unit, and the second pivot shaft of the second hand is coupled to the fingers of the second hand and the hand coupler for pivotable movement between the fingers of the second hand and the hand coupler.

6. The apparatus of claim 1, wherein the catcher means includes a first part catcher and a second part catcher, the first and second part catchers are coupled to the fixed and movable units for movement with one another between the catch position in which each part catcher is arranged to catch a part discharged from the injection mold machine and the release position in which each part catcher is arranged to release the part caught thereby to a conveyor that is included in the part receiver and underlies the first and second part catchers.

7. An apparatus comprising

a mold machine including a first unit and a second unit, the first and second units being arranged for relative movement between one another between a closed position closing the mold machine so that the first and second units cooperate to form a mold cavity therebetween to mold material in the mold cavity into a part and an opened position opening the mold machine for discharge of the part therefrom, and

a part catcher coupled to the first and second units for movement relative to the first and second units between a catch position arranged to catch the part discharged from the mold machine and a release position arranged to release the

part caught by the part catcher in response to relative movement between the first and second units between the opened position and the closed position.

8. The apparatus of claim 7, wherein the part catcher is arranged for pivotable movement relative to the first and second units from the release position to the catch position in response to relative movement between the first and second units from the closed position to the opened position and is arranged for pivotable movement relative to the first and second units from the catch position to the release position in response to relative movement between the first and second units from the opened position to the closed position.

9. The apparatus of claim 7, wherein the part catcher includes a first hand coupled to the first unit for pivotable movement relative thereto, a second hand coupled to the second unit for pivotable movement relative thereto, and a hand coupler coupled to the first and second hands for pivotable movement of the first hand relative to the first unit and the second hand relative to the second unit between the catch position in which the first and second hands cooperate to catch a part discharged from the mold machine and the release position in which the first and second hands cooperate to release the part caught thereby.

10. The apparatus of claim 9, wherein the first unit includes a first platen and a first mold body coupled to the first platen, the second unit includes a second platen and a second mold body coupled to the second platen for movement therewith, the first and second mold bodies cooperate to provide a mold formed to include the mold cavity when the first and second units are positioned in the closed position, the first hand is coupled to the first platen for pivotable movement relative thereto, and the second hand is coupled to the second platen for pivotable movement relative thereto.

11. The apparatus of claim 10, wherein the part catcher includes a shock absorber coupled to the first hand to engage the first platen when the part catcher is moved from the catch position to the release position.

12. The apparatus of claim 9, wherein each of the first and second hands includes a first pivot shaft, a second pivot shaft, and a plurality of fingers coupled to the first and second pivot shafts, the first pivot shaft of the first hand is coupled to the first unit for pivotable movement of the first hand relative to the first unit, the first pivot shaft of the second hand is coupled to the second unit for pivotable

movement of the second hand relative to the second unit, the hand coupler includes a pair of links coupled to the second pivot shafts for pivotable movement relative thereto, and the fingers of the first and second hands are positioned between the links of the hand coupler.

13. The apparatus of claim 12, wherein the part catcher includes a part retention panel coupled to each link and the part retention panels are spaced apart from one another to retain the part therebetween when the part catcher is positioned in the catch position.

14. The apparatus of claim 12, wherein each hand includes a wall mount and a part orientation wall coupled to the wall mount, the wall mount of the first hand is coupled to at least two of the fingers of the first hand, the wall mount of the second hand is coupled to at least two of the fingers of the second hand, each part orientation wall includes a guide surface, and the guide surfaces are non-vertical when the first and second hands assume the catch position and are vertical and face one another to orient a part caught by the part catcher for movement through a release opening formed between the first and second hands when the part catcher assumes the release position.

15. The apparatus of claim 7, further comprising a second part catcher coupled to the first and second units for movement with the other part catcher relative to the mold machine between a catch position arranged to catch a second part discharged from the mold machine and a release position arranged to release the second part in response to relative movement between the first and second units between the opened position and the closed position.

16. A part catcher for use with a mold machine including first and second units arranged for relative movement between one another between a closed position closing the mold machine so that the first and second units cooperate to form a mold cavity therebetween to mold material in the mold cavity into a part and an opened position opening the mold machine for discharge of the part therefrom, the part catcher comprising

a first hand adapted to be coupled to the first unit for movement relative thereto,

a second hand adapted to be coupled to the second unit for movement relative thereto, and

a hand coupler coupled to the first and second hands for movement of the first and second hands relative to one another and to the first and second units from a catch position arranged to catch a part discharged from the mold cavity to a release position arranged to release the part caught by the first and second hands in response to relative movement between the first and second units from the opened position to the closed position and for movement of the first and second hands relative to one another and to the first and second units from the release position to the catch position in response to relative movement between the first and second units from the closed position to the opened position.

17. The part catcher of claim 16, wherein, in the release position, the first and second hands cooperate to form a release opening therebetween for movement therethrough of a part caught by the part catcher and, in the catch position, the first and second hands cooperate to close the release opening.

18. The apparatus of claim 17, wherein the first and second hands cooperate to provide a part orienter adapted to move a part caught by the part catcher from a catch position orientation to a release position orientation for movement of the part through the release opening upon movement of the first and second hands from the catch position to the release position.

19. The apparatus of claim 16, further comprising a part retainer coupled to opposite sides of each of the first and second hands to retain a part caught by the part catcher on the first and second hands when the part catcher is positioned in the catch position.

20. The apparatus of claim 16, further comprising a pair of part retention panels and first and second shock absorbers, wherein each hand includes a first pivot shaft, a second pivot shaft, a plurality of fingers coupled to the first and second pivot shafts, and a plurality of spacer sleeves surrounding the first and second pivot shafts to space the fingers apart from one another, the first pivot shaft of the first hand is adapted to be coupled to a platen included in the first unit for pivotable movement relative thereto, the first pivot shaft of the second hand is adapted to be coupled to a platen included in the second unit for pivotable movement relative thereto, each finger of the first hand extends between a pair of the fingers of the second hand when the hands are positioned in the catch position, the hand coupler includes a pair of links coupled to the second pivot shafts for pivotable movement

relative thereto, the fingers of the first and second hands are positioned between the links, each part retention panel is coupled to one of the links so that the part retention panels are spaced apart from one another to retain a part therebetween on the hands when the hands are positioned in the catch position, each hand includes a wall mount and a part orientation wall coupled to the wall mount, the wall mount of the first hand is coupled to at least two of the fingers of the first hand, the wall mount of the second hand is coupled to at least two of the fingers of the second hand, each part orientation wall includes a guide surface, the guide surfaces are non-vertical when the hands assume the catch position and are vertical and face one another to orient a part caught by the hands for movement through a release opening formed between the hands when the hands assume the release position, the first shock absorber is coupled to the first hand for engagement with the platen included in the first unit, and the second shock absorber is coupled to the second hand for engagement with the platen included in the second unit.